

Fig. 1

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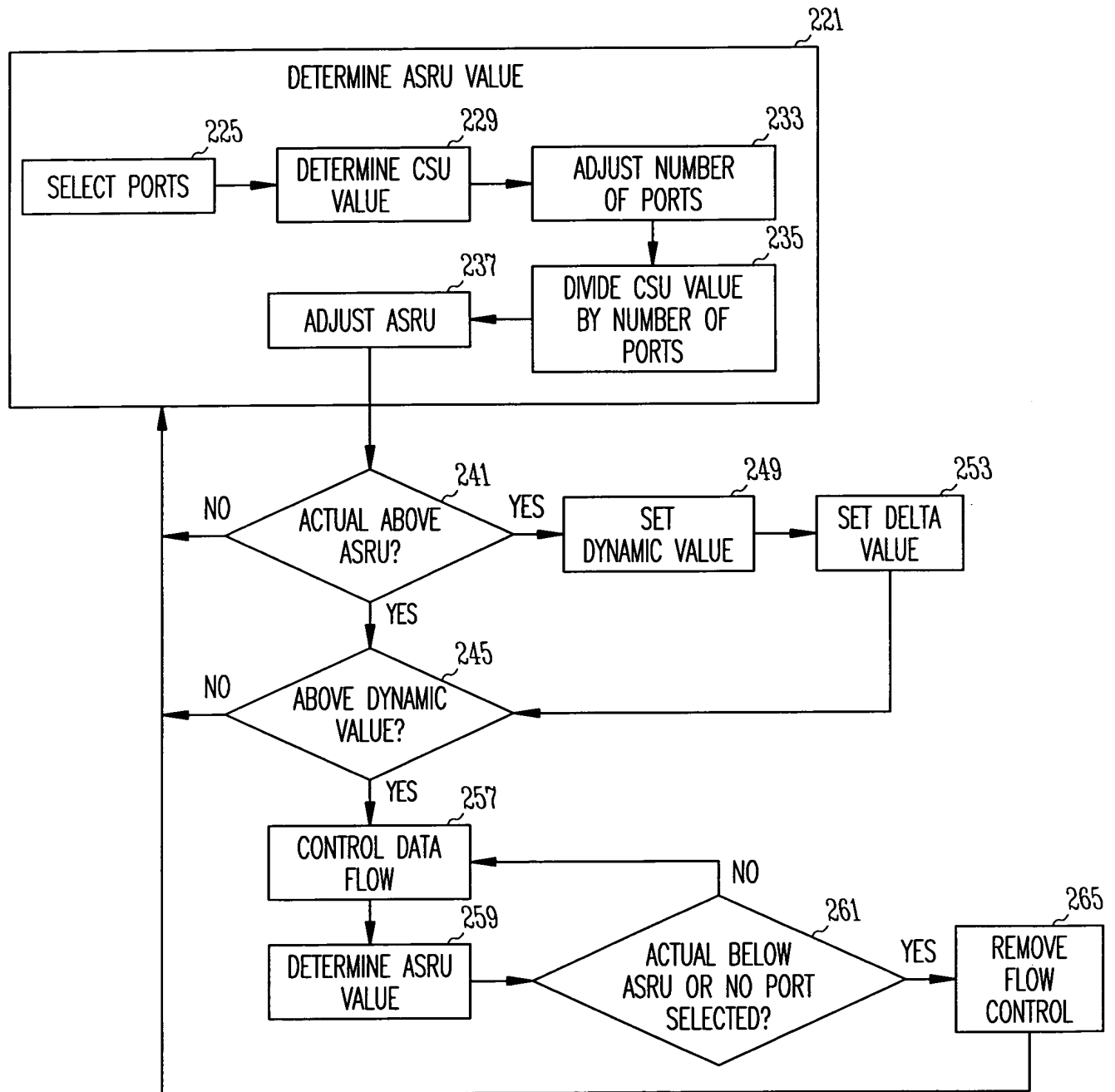


Fig. 2

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372 { PortRxUsage = Per Receive port utilization of memory  
 PortRxSharedUsage = (PortRxUsage > Tpmin) ? (PortRxUsage - Tpmin):0  
 CumulativeSharedUsage = SUM (PortRxSharedUsage)  
 Delta Value = Function(port speed, overall resource usage)

if (CumulativeSharedUsage is greater than a memory level for which adaptive flow control is enabled) — 380  
 {

NumPortsInShared = count of all the ports which are using memory in shared space // Different speed ports are scaled accordingly. 10G is counted as 10 ports. This value is used to determine the average shared memory usage per 1G port.

AverageSharedUsage1G = [CumulativeSharedUsage / NumPortsInShared]  
 AverageSharedUsage10G = AverageSharedUsage1G \* 10  
 DynamicThresh1G = AverageSharedUsage1G + Delta value  
 DynamicThresh10G = AverageSharedUsage10G + Delta value  
 DynamicThresh1Gdown = DynamicThresh1G - Delta value  
 DynamicThresh10Gdown = DynamicThresh10G - Delta value  
 }

DynamicThresh = (Portspeed == 10G) ? DynamicThresh10G : DynamicThresh1G  
 DynamicThreshdown = (Portspeed == 10G) ? DynamicThreshdown10G : DynamicThreshdown1G } 382

if (PortRxSharedUsage >= DynamicThresh) — 384  
 { // this port is consuming more than the average  
 AssertFlowControl;  
 FlowControlTime = 16'hFFFF or  
 Function(PortRxSharedUsage - DynamicThresh)

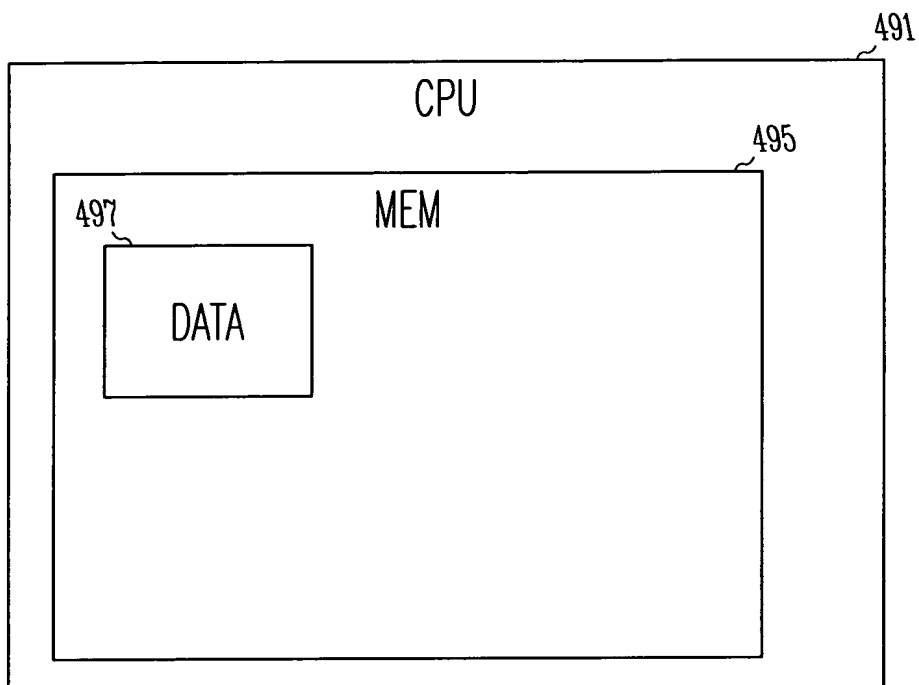
}  
 else if (PortRxSharedUsage < DynamicThreshDown) or

(PortRxUsage <= Tpmin) — 386

{ // this port is no longer causing congestion  
 DeassertFlowControl;  
 }

*Fig. 3*

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*Fig. 4*